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PTO/SB/33 (07-05)

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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

10176P00030US

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on

3-6-06

Signature

Terri Craine

Typed or printed name Terri Craine

Application Number

09/836,499

Filed

4/18/01

First Named Inventor

Frank Becker

Art Unit

1732

Examiner

Edmund Lee

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

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applicant/inventor.

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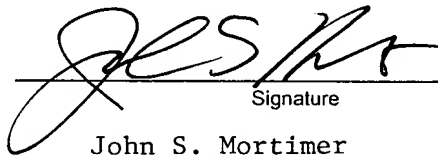
assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒

attorney or agent of record. 30,407

Registration number

  
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attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

3/6/06

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

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\*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicants: Frank Becker et al. ) METHOD AND APPARATUS FOR  
 ) PRODUCING A RESPIRATORY  
 ) FILTER  
 )  
Serial No.: 09/837,499 ) Group Art Unit: 1732  
 )  
Filed: April 18, 2001 ) Examiner: Edmund H. Lee

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Sir:

This is a request for a review of the rejection made in the October 6, 2005 Final Office Action in the above case. A review is requested with respect to the errors specifically identified below.

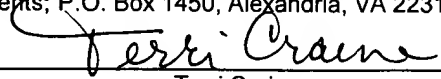
Background

The claimed subject matter relates to a respiratory filter consisting of a connecting part 1 that functions as a mold within which a filtering mixture of: a) a granular adsorbent, absorbent, chemisorptive catalytic material, or activated carbon; and b) a meltable polymer is formed to produce a unitary filtering assembly that can be incorporated into a respirator or fan filter unit 6, as through the use of an adapter 4. In the embodiment shown, the connecting part 1 is generally ring-shaped with an inside surface against which the mixture is molded. This structure can be seen in Applicant's Figure 1.

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37 CFR 1.8  
CERTIFICATE OF MAILING

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Terri Craine

Ideally, all air that is intaken through the respiratory filter passes through the filtering mixture. In prior art filtering structures, a problem arises at the interface between filtering material and the inner surface of the connecting part to which the filtering material conforms, at which interface air may pass through the unitary filtering assembly without being forced through and filtered by the filtering material. This phenomenon is shown in a sketch and described in Applicant's June 24, 2005 Amendment, on page 7, ¶13.

According to the invention, the inner surface of the connecting part 1 is provided with a complete or partial groove or tongue 5 into/around which the filtering mixture is formed. As a result, air moving at the interface in a straight line is caused to be directed through the filtering mixture, as shown in sketches, and described in Applicant's June 24, 2005 Amendment, in the last paragraph on page 7, and first paragraph on page 8 therein.

#### The Rejection of Claims

All pending claims (1, 2, 4-10 and 12-21) stand rejected under 35 USC §103 as obvious over U.S. Patent No. 5,817,263 (Taylor) in view of U.S. Patent No. 5,660,173 (Newton).

#### The Pending Claims

There are two groups of claims. a) independent method claim 1 and its dependent claims 8-10, 12, 15 and 16; and b) independent apparatus claim 2 and its dependent claims 4-7, 13, 14 and 17-21.

#### Error No. 1

Taylor and Newton do not collectively teach or suggest a connecting part with a groove/tongue into/against which a filtering mixture is formed as in independent claims 1 and 2.

## Argument

The Examiner acknowledges that Taylor does not teach an inner surface with a complete or partial groove or tongue. Newton is relied upon for the alleged teaching of a connecting part with a complete or partial groove or tongue on an inner surface of a connecting part.

Newton has a housing 1 in which loose particulate of different size is placed. A surface against which the particulate is placed is characterized by Newton as a "non-smooth, dimpled surface 29, (col. 4, line 25). On page 4 of the October 6, 2005 Action, the Examiner asserts that Newton's teaching of "an irregular surface" is a teaching of "complete or partial grooves or tongue on an inner surface" (see pg. 5 of the Action, lines 16-20).

While the protuberances and depressions may facilitate placement of the loose particulate material, they do not correspond in structure or function to the complete or partial groove claimed by the Applicant on the inner surface of the claimed connecting part, that assures contact of moving air with the filtering mixture. This is explained fully in Applicant's June 24, 2005 Amendment on page 10, lines 3 through the penultimate line of page 11.

## Error No. 2

Taylor and Newton do not teach or suggest a groove or tongue extending continuously substantially completely around an inner surface as in claim 16 (which depends from claim 1) and claim 17 (which depends from claim 2).

## Argument

Even if the dimples/depressions in Newton are viewed as grooves or tongues, which Applicant strongly suggests is not the case, extending such dimples/depressions fully continuously around the inner surface would be contrary to Newton's teachings. Newton

matches the depression size to the particle size, so that the particles can nest therein. Making a continuous configuration would frustrate the interlocking of the individual particles within the depressions as is described by Newton to facilitate packing of the particles. The particles would be permitted to slide along any significant length "tongue" or "groove"

#### Error No. 3

The combination of Newton with Taylor as made by the Examiner is inappropriate.

#### Argument

Newton teaches an irregular surface to facilitate the packing of particulate material **without a binder**, such as the polymer recited by Applicant in each of its claims. The relative sizing of the surface irregularities and the particles can be seen in Fig. 2 of Newton to maximize packing density by allowing the particles to nest and thereby lock in place. It is respectfully submitted that the concepts of molding a mixture that will solidify against a surface and packing loose particulate into depressions within a surface are distinct. This argument is further elaborated in Applicant's June 24, 2005 Amendment on page 10, in the last three paragraphs. Newton does not even hint that the depressions might affect flow through the materials in a manner to maximize filtering. Thus, one skilled in the art would not be motivated to combine the teachings of Taylor and Newton as proposed by the Examiner.

#### Error No. 4

The prior art does not teach or suggest a fastener on the periphery of a connecting part as in claims 4 and 18.

#### Argument

Claims 4 and 18 recite at least one fastener on the periphery of the connecting part.

The Examiner argues on page 5 of the October 6, 2005 Action that "it is well-known in the molding art to attach a preform to a shell or another component by fasteners" (on page 5 in the last paragraph). The Examiner makes this general statement but does not cite any art wherein a like connecting part with a molded material therein is provided with fasteners on its periphery to facilitate direct or indirect connection to a fan or filter unit. Newton does not disclose such a fastener. It is submitted that the Examiner's statement alone, without citation to art wherein a like connected part has fasteners on its periphery, does not make out a *prima facie* case of obviousness.

Claims 6 and 21 more specifically characterize the nature of the fastener as either threaded or for "snap-in" to further distance the claims from the prior art.

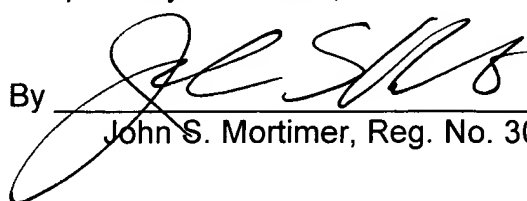
The significance of the limitations in dependent claims 12 and 15 is explained in Applicant's June 24, 2005 Amendment on page 13, in the last three paragraphs.

#### Conclusion

It is respectfully requested that the panel review the Examiner's October 6, 2005 rejection particularly based upon the errors noted above, and that the Examiner's rejection of all pending claims be reversed.

Should any fees be required in connection with this matter, please charge our deposit account No. 23-0785.

Respectfully submitted,

By   
John S. Mortimer, Reg. No. 30,407

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March 6, 2006